## ABSTRACT OF THE DISCLOSURE

The present invention provides a network interface adapter for connecting a client computer to a computer network that includes a reduced hardware media access controller (MAC) coupled through a physical interface (PHY) to the network physical link. A significant portion of the MAC functionality is implemented as software within the processor of the host client computer. The hardware portion of the preferred MAC implementation provides memory for buffering communications between the PHY and the client computer. The preferred hardware aspects of a MAC in accordance with the present invention also includes a register interface for register-driven communications between the hardware portion of the MAC and the software portions of the MAC implemented within the client computer. By implementing most of the MAC functionality in software within the host computer, the preferred MAC provides lower cost, lower power consumption, and generally greater flexibility.